

What is claimed is:

[Claim 1] 1. A method of encoding audio-visual information comprising:
preparing audio information having a plurality of bytes;
preparing video information having a plurality of bytes;
configuring at least one synchronization field in the audio information to form at least one synchronization-audio packet (SAP), each of the at least one SAP having at least one byte of the audio information;
configuring at least one control field in the audio information to form at least one control-audio packet (CAP), each of the at least one CAP having at least one byte of the audio information;
configuring at least one video field and merging both of the audio information and the video information to form at least one video-audio packet (VAP), each of the at least one VAP having at least one byte of the audio information; and
combining the at least one SAP, the at least one CAP, and the at least one VAP to form at least one universal audio-video frame (UAVF).

[Claim 2] 2. The method according to claim 1, wherein:
the at least one synchronization field stores at least one synchronization data for marking a start of the at least one UAVF.

[Claim 3] 3. The method according to claim 1, wherein:
the at least one control field stores at least one control data for reproducing the video information.

[Claim 4] 4. The method according to claim 1, wherein:
for each of the at least one SAP, the at least one byte of the audio information is arranged behind the at least one synchronization field;
for each of the at least one CAP, the at least one byte of the audio information is arranged behind the at least one control field; and

for each of the at least one VAP, the at least one byte of the audio information is arranged behind the at least one video field.

[Claim 5] 5. The method according to claim 1, wherein:

each of the at least one synchronization field stores at least nine bytes of data;
each of the at least one control field stores at least nine bytes of data; and
each of the at least one video field stores at least nine bytes of data.

[Claim 6] 6. The method according to claim 1, wherein:

each of the at least one control field stores nine binary codes of E1, 81, C7, E1, 81, C7, E1, 81, and C7.

[Claim 7] 7. The method according to claim 1, further comprising:

recording the at least one UAVF in a recording medium.

[Claim 8] 8. The method according to claim 7, wherein:

the recording medium is a compact disk-digital audio (CD-DA) with a diameter of 108 mm.

[Claim 9] 9. A recording medium for audio-visual information comprising:

plural bytes of audio information, recorded in the recording medium, for playing back as sound;

plural bytes of video information, recorded in the recording medium, for reproducing as image;

at least one synchronization-audio packet (SAP), recorded in the recording medium, each of the at least one SAP having a synchronization field and a first audio field, in which the first audio field stores at least one byte of the audio information;

at least one control-audio packet (CAP), recorded in the recording medium, each of the at least one CAP having a control field and a second audio field, in

which the second audio field stores at least one byte of the audio information;
and
at least one video-audio packet (VAP), recorded in the recording medium, each of the at least one VAP having a video field and a third audio field, in which the third audio field stores at least one byte of the audio information, thereby:
combining the at least one SAP, the at least one CAP, and the at least one VAP to form the at least one UAVF.

[Claim 10] 10. The recording medium according to claim 9, wherein:
the synchronization field stores at least one synchronization data for marking a start of the at least one UAVF.

[Claim 11] 11. The recording medium according to claim 9, wherein:
the control field stores at least one control data for reproducing the video information.

[Claim 12] 12. The recording medium according to claim 9, wherein:
the first audio field is arranged behind the synchronization field;
the second audio field is arranged behind the control field; and
the third audio field is arranged behind the video field.

[Claim 13] 13. The recording medium according to claim 9, wherein:
the synchronization field stores at least nine bytes of data;
the control field stores at least nine bytes of data; and
the video field stores at least nine bytes of data.

[Claim 14] 14. The recording medium according to claim 9, wherein:
the synchronization field stores nine binary codes of E1, 81, C7, E1, 81, C7, E1, 81, and C7.

[Claim 15] 15. The recording medium according to claim 9, wherein:
the recording medium is a compact disk-digital audio (CD-DA) with a diameter of 108 mm.

[Claim 16] 16. A method of decoding audio-visual information formatted by at least one universal audio-video frame (UAVF) having at least one synchronization-audio packet (SAP), at least one control-audio packet (CAP), and at least one video-audio packet (VAP), the method comprising:
detecting data stored in a synchronization field of the at least one SAP for determining a start of the at least one UAVF;
accessing a first portion of the audio information from the at least one SAP;
detecting data stored in a control field of the at least one CAP;
accessing a second portion of the audio information from the at least one CAP;
accessing the video information stored in a video field of the at least one VAP;
accessing a third portion of the audio information from the at least one VAP;
reproducing the video information stored in the video field in response to the data stored in the control field; and
playing back the first to third portions of the audio information.

[Claim 17] 17. The method according to claim 16, wherein:
for each of the at least one SAP, the first portion of the audio information is arranged behind the synchronization field;
for each of the at least one CAP, the second portion of the audio information is arranged behind the control field; and
for each of the at least one VAP, the third portion of the audio information is arranged behind the video field.

[Claim 18] 18. The method according to claim 16, wherein:
the synchronization field stores at least nine bytes of data;
the control field stores at least nine bytes of data; and
the video field stores at least nine bytes of data.

[Claim 19] 19. The method according to claim 16, wherein:
the synchronization field stores nine binary codes of E1, 81, C7, E1, 81, C7, E1, 81, and C7.

[Claim 20] 20. The method according to claim 16, wherein:
the at least one UAVF is recorded in a compact disk-digital audio (CD-DA) with a diameter of 108 mm.